

ABSTRACT

A microchip laser arrangement is disclosed. The arrangement is operative to emit Q-switched laser pulses at 1.54  $\mu\text{m}$ . The lasing medium of the laser arrangement is preferably comprised of Yb:Er-glass, and the Q-switch is comprised of a saturable absorber of cobalt doped spinel crystal. The lasing medium is preferably bonded to the absorber to form a monolithic body, upon the surface of which there are deposited dielectric stacks forming a resonant laser cavity. Pumping of the active medium is performed by means of an InGaAs laser diode emitting light at 0.97  $\mu\text{m}$ , corresponding well with the absorption of the Yb:Er-glass material.

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(Elected for publication: Fig.1)

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